

CURRICULUM VITAE

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Citizenship: Taiwan

Marital Status: Married

Education:

1992-2000 M.D., National Taiwan University Medical School, Taipei, Taiwan
2001-2006 Ph.D., Neurobiology, Duke University, Durham, NC, USA

Brief Chronology of Employment:

1999-2000 Internships, National Taiwan University Hospital, Taipei, Taiwan
2000-2001 Research Assistant, Laboratory of Dr. Chiang-Shan Ray Li
Chang-Gung Memorial Hospital, Taiwan
2002-2006 Graduate Student, Laboratory of Dr. Miguel Nicolelis
Department of Neurobiology, Duke University
2006-2009 Postdoctoral Fellow, Laboratory of Dr. Miguel Nicolelis
Department of Neurobiology, Duke University
2009-Date Tenure Track Investigator, Neural Circuits and Cognition Unit
Laboratory of Experimental Gerontology, NIA, NIH

Societies

Society for Neuroscience, 2000-present

Honors and Other Special Scientific Recognition:

1991 Research Science Institute (RSI) Summer Camp, Washington, DC
1992-2000 Four times Presidential Award, National Taiwan University
1992 Bronze Medal, 33rd International Mathematical Olympiad (IMO)
1999 Harvard Medical School Exchange Student, Clinical rotation
2002 Hughes Medical Institute Predoctoral Fellowship, Neuroscience
Honorable mention
2008 NARSAD 2008 Young Investigator Award
2009 Pathway to Independence (K99/R00) Award, NIMH, NIH
(*Declined to accept the investigator position at the NIA, NIH)

Invited Lectures:

- 2005/09 "In Vivo Electrophysiology: Beyond Sensory-Motor Functions", Education Series on Neuroscience, National Health Research Institutess (NHRI), Taiwan
- 2005/09 "A novel mode of neuromodulatory action: Transient synchronization of basal forebrain cortical projecting GABAergic neuronal ensemble at gamma frequency", NHRI Conference on Neuroscience, Taiwan
- 2007/01 "Revealing the functions of basal forebrain non-cholinergic neuronal ensembles", Institute of Neuroscience, National Yang Ming University, Taiwan
- 2007/01 "Revealing the functions of basal forebrain non-cholinergic neuronal ensembles", Institute of Biomedical Sciences, Academia Sinica, Taiwan
- 2007/11 "Motivational Saliency Encoded By Synchronous Bursting Of Basal Forebrain Non-Cholinergic Neurons", Sleep and Circadian Biology DataBlitz, Society for Neuroscience annual meeting
- 2008/03 "Neuronal ensemble bursting in the basal forebrain encodes salience irrespective of valence", Computational and Systems Neuroscience (COSYNE), main meeting
- 2008/04 "Neuronal ensemble bursting in the basal forebrain encodes salience irrespective of valence", Janelia Farm Conference on Neural Circuits and Decision-Making in Rodents
- 2008/08 "The roles of non-cholinergic basal forebrain neurons in top-down attention", Department of Pharmacology, National Taiwan University, Taiwan
- 2008/10 "The roles of non-cholinergic basal forebrain neurons in top-down attention", Department of Psychology and Neuroscience, Duke University
- 2008/12 "The roles of non-cholinergic basal forebrain neurons in top-down attention", Cognition and Neuroscience Program, University of Texas at Dallas
- 2008/12 "The roles of non-cholinergic basal forebrain neurons in top-down attention", National Institute on Aging/NIH, Baltimore, MD
- 2009/01 "The roles of non-cholinergic basal forebrain neurons in top-down attention", Department of Psychology, University of Chicago
- 2009/02 "The roles of non-cholinergic basal forebrain neurons in top-down attention", Department of Psychology, University of Toronto
- 2009/03 "Attentional modulation of cortical ERPs gated by basal forebrain ensemble bursting", Computational and Systems Neuroscience (COSYNE), workshop on "Modulation of cortical responses by behavior and brain state"
- 2009/04 "The roles of non-cholinergic basal forebrain neurons in top-down attention", Neuroscience program, Cold Spring Harbor Laboratory
- 2009/06 "The roles of non-cholinergic basal forebrain neurons in top-down attention", Annual meeting of the Associated Professional Sleep Societies (APSS), symposium on "New Insights into the Role of the Basal Forebrain in Cortical Activation"

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| 2009/07 | “The roles of non-cholinergic basal forebrain neurons in top-down attention”, RIKEN Brain Science Institute, Wako, Japan |
| 2009/07 | “The roles of non-cholinergic basal forebrain neurons in top-down attention”, Department of Molecular and System Neurobiology, University of Tokyo, Japan |
| 2009/11 | “The roles of non-cholinergic basal forebrain neurons in top-down attention”, Neuroscience Seminar Series, University of Illinois Urbana-Champaign |

Journal Reviewer (ad hoc):

Journal of Neuroscience, Frontiers in Integrative Neuroscience, The Chinese Journal of Physiology

Grants and Research Support:

1. National Institute on Aging, NIH Intramural Research Program, 2009 – Present
2. NARSAD 2008 Young Investigator Award, PI: Shih-Chieh Lin, 7/2008 – 9/2009
The roles of basal forebrain neuronal ensembles in top-down attention
3. Pathway to Independence (K99/R00) Award, PI: Shih-Chieh Lin, 4/2009 – 3/2014
National Institute of Mental Health (NIMH), NIH
The roles of basal forebrain neuronal ensemble in top-down attention
** Declined the award in order to accept a tenure track investigator position at the National Institute on Aging, NIH

Reviews and Book Chapters:

1. **Lin S.-C.** and Gervasoni D., Defining Global Brain States using Multielectrode Field Potential Recordings. In: Nicolelis, M.A.L. (Eds.): Methods for Neural Ensemble Recordings, 2nd Edition, CRC Press, 2007, pp. 145-168. [\[Link\]](#)

Publications:

1. Li C.-S., **Lin S.-C.**: A perceptual level mechanism of the inhibition of return in oculomotor planning. *Cognitive Brain Research* 14:269-276, 2002. [\[Abs\]](#)
2. Li C.-S., **Lin S.-C.**: Inhibition of return in temporal order saccades. *Vision Research* 42:2089-2093, 2002. [\[Abs\]](#)
3. Li C.-S., Chang H.-L., **Lin S.-C.**: Intact inhibition of return of attention in children with ADHD. *Experimental Brain Research* 149(1):125-30, 2003. [\[Abs\]](#)
4. Ribeiro S., Gervasoni D., Soares E., Zhou Y., **Lin S.-C.**, Pantoja J., Lavine M., Nicolelis M.A.L.: Long-lasting novelty-induced neuronal reverberation during slow-wave sleep in multiple forebrain areas. *PLoS Biology* 2(1):E24, 2004. [\[Abs\]](#)
5. **Lin S.-C.***, Gervasoni D.* , Ribeiro S.* , Soares E., Pantoja J., Nicolelis M.A.L.: Global forebrain dynamics predict rat behavioral states and their transitions. *J Neurosci* 24(49): 11137-47, 2004. [\[Abs\]](#)
6. Dzirasai K., Ribeiro S., Costa R.M., Santos L.M., **Lin S.-C.**, Grosmark A., Sotnikova T.D., Gainetdinov R.R., Caron M.G., Nicolelis M.A.L.: Dopaminergic control of wake-sleep states. *J Neurosci* 26(41):10577-10589, 2006. [\[Abs\]](#)
7. Costa R.M., **Lin S.-C.**, Sotnikova T.D., Gainetdinov R.R., Caron M.G., Nicolelis M.A.L.: Rapid alterations in corticostriatal ensemble coordination during acute

- dopamine dependent motor dysfunction. *Neuron* 52(2):359-69, 2006. [\[Abs\]](#)
- 8. **Lin S.-C.**, Gervasoni D., Nicolelis M.A.L.: Fast modulation of prefrontal cortex activity by basal forebrain non-cholinergic neuronal ensembles. *J Neurophysiol* 96(6):3209-19, 2006. [\[Abs\]](#)
 - 9. Pereira A., Ribeiro S., Wiest M., Moore L.C., Pantoja J., **Lin S.-C.**, Nicolelis M.A.L.: Processing of tactile information by the hippocampus. *Proc Natl Acad Sci U S A* 104(46):18286-91, 2007. [\[Abs\]](#)
 - 10. Ribeiro S., Shi X., Engelhard M., Zhou Y., Zhang H., Gervasoni D., **Lin S.-C.**, Wada K., Lemo N.A., Nicolelis M.A.L.: Novel experience induces persistent sleep-dependent plasticity in the cortex but not in the hippocampus. *Frontiers in Neuroscience* 1(1):43-55, 2007. [\[Abs\]](#)
 - 11. **Lin S.-C.**, Nicolelis M.A.L.: Neuronal ensemble bursting in the basal forebrain encodes salience irrespective of valence. *Neuron* 59(1):138-149, 2008. [\[Abs\]](#)
 - 12. Zhang H., **Lin S.-C.**, Nicolelis M.A.L.: Acquiring local field potential information from amperometric neurochemical recordings. *J Neurosci Methods* 179(2):191-200, 2009. [\[Abs\]](#)
 - 13. Diniz Behn C.G., Klerman E.B., Mochizuki T., **Lin S.-C.**, Scammell T.E.: Dynamics of sleep-wake behavior in orexin knockout mice. *Sleep* (In Press), 2010.